CLAIM AMENDMENTS

1. (currently amended) A method of diagnosing skin disease comprising:

providing a patient having a skin disease selected from the group consisting of dysplastic melanocytic nevi; banal nevi; lentigines; actinic keratoses; seborrheic keratoses; basal cell carcinoma; and malignant melanoma;

emitting a beam of visible or near-IR light into a portion of the skin afflicted with the skin disease;

collecting and analyzing reflected light from the beam, thereby producing a disease spectrum;

emitting a beam of visible or near-IR light into a control skin portion of the patient which is not afflicted with the skin disease;

collecting and analyzing reflected light from the beam, thereby producing a control spectrum;

comparing the control spectrum and the disease spectrum; and

identifying the skin disease as dysplastic melanocytic nevi; banal nevi; lentigines; actinic keratoses; seborrheic keratoses; basal cell carcinoma; or malignant melanoma based on said comparison, said method of diagnosing skin disease having an rapid acquisition time of minutes.

2. Cancelled.

3. (previously presented) The method according to claim 1 wherein the control spectrum and the disease spectrum are compared at wavelengths corresponding to visible or near-IR absorption by oxyhemoglobin, deoxyhemoglobin, water, proteins, lipids or combinations thereof.

4. (original) The method according to claim 1 wherein the control spectrum and disease spectra are reduced to diagnostic wavelengths by a region selection algorithm.

5. (original) The method according to claim 4 wherein said wavelengths are selected from the group consisting of: 518-598 nm; 618-698 nm; 718-798 nm; 918-998 nm; 1158-1238 nm; 1418-1498 nm; 1718-1798 nm; and combinations thereof.

6. (original) The method according to claim 1 wherein the control spectrum and the disease spectrum are compared at wavelengths selected from the group consisting of: 518-598 nm; 618-698 nm; 718-798 nm; 918-998 nm; 1158-1238 nm; 1418-1498 nm; 1718-1798 nm; and combinations thereof.

7. (original) The method according to claim 1 wherein the control spectrum and the condition spectra are averaged spectra.

8. (previously presented) The method according to claim 4 wherein the skin disease is diagnosed by performing multivariate analysis on the diagnostic wavelengths.

9: (original) The method according to claim 1 wherein the skin disease is diagnosed comparing the control spectrum and the condition spectrum to a database of visible/near-infrared spectra taken from afflicted and control skin portions of individuals having specific skin diseases.

10. (currently amended) A method comprising:

a) providing a patient having a skin disease selected from the group consisting of: dysplastic melanocytic nevi; banal nevi; lentigines; actinic keratoses; seborrheic keratoses; basal cell carcinoma; and malignant melanoma;

b) emitting a beam of visible or near-IR light into a portion of the skin afflicted with the skin disease;

c) collecting and analyzing reflected light from the beam, thereby producing a disease spectrum;

d) emitting a beam of visible or near-IR light into a control skin portion of the patient which is not afflicted with the skin disease;

e) collecting and analyzing reflected light from the beam, thereby producing a control spectrum;

f) performing a biopsy on the portion of the skin afflicted with the skin disease;

g) classifying the skin disease as dysplastic melanocytic nevi; banal nevi; lentigines; actinic keratoses; seborrheic keratoses; basal cell carcinoma; or malignant melanoma based on the biopsy;

h) assigning the control spectrum and the disease spectrum to a skin disease group based on the classification; and

i) creating a database by repeating steps (a) to (h), characterized in that steps (b) to (e) have an rapid acquisition time of minutes.

11. Cancelled.

12. (previously presented) The method according to claim 10, including step (j) reducing the control spectra and the disease spectra in each skin disease group in the database to diagnostic wavelengths using a region selection algorithm.

13. (currently amended) The method according to claim 12 including steps:

k) providing a patient having a skin disease;

l) emitting a beam of visible or near-IR light into a portion of the skin afflicted with the skin disease;

m) collecting and analyzing reflected light from the beam, thereby producing a disease spectrum;

n) emitting a beam of visible or near-IR light into a control skin portion of the patient which is not afflicted with the skin disease;

o) collecting and analyzing reflected light from the beam, thereby producing a control spectrum;

p) analyzing the control spectrum and the disease spectrum over the diagnostic wavelengths using the algorithm; and

q) identifying the skin disease based on said analysis, said identification having ~~an~~ rapid acquisition time of minutes.

14. (previously presented) A method of screening a skin portion for deciding if a biopsy is necessary comprising:

providing a patient having a skin portion afflicted with a skin disease selected from the group consisting of: dysplastic melanocytic nevi; banal nevi; lentigines; actinic keratoses; seborrheic keratoses; basal cell carcinoma; and malignant melanoma;

emitting a beam of visible or near-IR light into said skin portion;

collecting and analyzing reflected light from the beam, thereby producing a disease spectrum;

emitting a beam of visible or near-IR light into a control skin portion of the patient which is not afflicted with the skin disease;

collecting and analyzing reflected light from the beam, thereby producing a control spectrum;

comparing the control spectrum and the disease spectrum; and

deciding if a biopsy is necessary based on said comparison.

15. (previously presented) The method according to claim 14 wherein the first beam and the second beam comprise visible and near-IR light.

16. (previously presented) The method according to claim 14 wherein the control spectrum and the disease spectrum are compared at wavelengths corresponding to

visible or near-IR absorption by oxyhemoglobin, deoxyhemoglobin, water, proteins, lipids or combinations thereof.

17. (previously presented) The method according to claim 14 including reducing the control spectrum and disease spectra to diagnostic wavelengths using a region selection algorithm.

18. (previously presented) The method according to claim 17 wherein said wavelengths are selected from the group consisting of: 518-598 nm; 618-698 nm; 718-798 nm; 918-998 nm; 1158-1238 nm; 1418-1498 nm; 1718-1798 nm; and combinations thereof.

19. (previously presented) The method according to claim 14 wherein the control spectrum and the disease spectrum are compared at wavelengths selected from the group consisting of: 518-598 nm; 618-698 nm; 718-798 nm; 918-998 nm; 1158-1238 nm; 1418-1498 nm; 1718-1798 nm; and combinations thereof.

20. (previously presented) The method according to claim 14 wherein the control spectrum and the condition spectra are averaged spectra.

21. (previously presented) The method according to claim 1 wherein the beam is a beam of visible and near-IR light.

22. (previously presented) The method according to claim 10 wherein the beam is a beam of visible and near-IR light.

23. (previously presented) The method according to claim 13 wherein the beam is a beam of visible and near-IR light.